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| 10/647,414 | 08/25/2003 | John P. Vukos | KCC 4974 (K-C 18,840) | 2803 |
| 321 | 7590 | 06/12/2006 | EXAMINER | |
| SENNIGER POWERS ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102 | | | BOGART, MICHAEL G | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3761 | |

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,414

Applicant(s)

VUKOS ET AL.

Examiner

Michael G. Bogart

Art Unit

3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 40-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 18, 20-25 and 40-43 is/are rejected.
- 7) ☒ Claim(s) 14-17 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/12/05; 1/12/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections – 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 8 and 20-25, 40, 41 and 43 are rejected under 35 U.S.C. § 102(b) as being anticipated by Topolkaraev *et al.* (US 6,071,450 A)(hereinafter “Topolkaraev”).

As interpreted herein, a microlayer film any thin film.

Regarding claims 1 and 22, Topolkaraev teaches an absorbent article, comprising a unitary system of microlayered film constructed and arranged for performing the multiple functions of such absorbent article, said system comprising;

at least one first microlayer film region (130) having a liquid intake function,

at least one second microlayer film region having a liquid uptake and distribution function,

at least one third microlayer film region having a liquid retention function, and

at least one fourth microlayer film region (120) having a liquid barrier function (col. 30, line 52-col. 31, line 52).

Regarding the second and third film regions, film region (120) is made up of laminates of component films, meaning that there are many film layers from the top to bottom surfaces of the overall film (col. 5, lines 4-20). The upper and intermediate subcomponent films of layer (120) are each capable of performing a liquid intake function and a liquid retention function (as some are biodegradable), such that the upper layers will accept and spread out liquid inflow so that it flows downward, while at the same time the layers act as a barrier to prevent leakage to the outside of layer (120), and the liquid is retained therein. Apparatus claims must be structurally distinguishable over the prior art. There is no structure claimed that distinguishes the claimed invention over Topolkaraev.

Regarding claims 2-6, these claims are defined by the various layers that are co-extruded during manufacturing. This makes each of claims 2-6 product by process claim. Product-by-process claims are not limited by the manipulations of the recited steps, only the structure implied by the steps. Topolkaraev teaches that a combination of layers are coextruded and then extruded through a series of multiplying elements where they split and coextruded again, the process being repeated multiple times until the final product is complete, with all of the layers being coextruded to each other simultaneously (col. 10, lines 47-co. 11, line 11). The end product is physically the same as that claimed by claims 2-6.

Regarding claim 8, Topolkaraev teaches that the micro layer film regions include at least two microlayers, forming a laminate (col. 4, lines 12-29).

Regarding claims 20 and 21, Topolkaraev teaches a personal care product, such as a diaper (100).

Regarding claims 23 and 24, Topolkaraev teaches the retention region is formed entirely of microlayered film. As interpreted herein, layer (120) contains many layers, the top third of which can perform a liquid intake function, the middle third can perform a liquid uptake and distribution function, the bottom third of which can perform a retention function, as some liquid will be retained over time. Absorbent layer (140) is regarded as a separate element from the retention region of sheet (120).

Regarding claim 25, Topolkaraev teaches that at least one region (140) is free of micro layer film (col. 31, lines 15-30).

Regarding claim 40, Topolkaraev teaches a microlayer (130) having perforations and a microlayer (120) having no perforations (col. 31, lines 1-15).

Regarding claims 41 and 43, Topolkaraev teaches that the microlayered film is biodegradable and will delaminate as the biodegradable layers are contacted with liquid, while regions of the article that have not been exposed to the liquid will not degrade and delaminate.

Claims 1-13, 22 and 42 are rejected under 35 U.S.C. § 102(e) as being anticipated by anticipated by Topolkaraev (US 2004/0091677 A1)(hereinafter “'677”)

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. § 102(e). This rejection under 35 U.S.C. § 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, '677 teaches a film comprising many layers. The top layer can receive and intake liquids. Regarding the second and third film regions, each of the film regions is made up of laminates of component films, meaning that there are many film layers from the top to bottom surfaces of the overall film. The intermediate films are each capable of performing a liquid intake function and a liquid retention function, such that the upper layers will accept and spread out liquid inflow so that it flows downward to the area above the lowest layer. Some or all of the layers contribute to the overall film's ability to function as a barrier to liquid (§'s 0008, 0014 and 0017)(fig. 1).

Regarding claims 2-6, these claims are defined by the various layers that are co-extruded during manufacturing. This makes each of claims 2-6 and product by process claim. Product-by-process claims are not limited by the manipulations of the recited steps, only the structure implied by the steps. '677 teaches that the many layers are coextruded together to produce the end product film (§ 0022). The end product is physically the same as that claimed by claims 2-6, as all layers have been extruded together.

Regarding claim 8, '677 teaches many layers, preferably 16-60. A film with 16 microlayers may be divided into 4 film regions each comprising a laminate of 4 microlayers (§ 0039).

Regarding claim 9, '677 teaches that the laminate comprises a thermoplastic melt extendable elastomer microlayer and a melt extendable non-elastic polymer microlayer (§'s 0040-0042 and 0049).

Regarding claim 10, '677 teaches that the laminate teaches that the laminate includes a multiplicity of alternating elastomer and non-elastic polymer microlayers (§'s 0042, 0049 and 0097).

Regarding claims 11-13, '677 teaches that the laminate is stretched after coextrusion to form corrugations and microchannels (§'s 0037 and 0042). As interpreted herein, microchannels are viewed as small channels, no specific dimension component is read into this term. Viewing the overall disclosure of the reference, as best understood by the examiner all or essentially all of the layers may have small channels.

Regarding claims 22 and 42, '677 teaches a perforated liquid uptake and distribution region (§ 0085).

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 18 are rejected under 35 U.S.C. § 103(a) as being obvious over Topolkaraev.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

Topolkaraev teaches an open area in the top layer in the form of apertures.

The reference does not teach the specific size of the open area, the density of the second micro layer or the claimed absorbent capacity.

Further regarding the rejection of claim 7 under 35 USC § 103, generally, differences in test characteristics will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such test characteristic is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Regarding claim 7, the benefits of increasing absorbent capacity would have been known prior to applying a test, making these values result-effective variables. One of ordinary skill in the art would have recognized that increasing absorbent capacity allows the final product to hold more liquid in use. MPEP § 2144.04.

Regarding claim 18, the examiner takes official notice of the fact that superabsorbents are widely used in many different types of absorbent articles.

Regarding the difference in relative dimensions and density, mere changes in these parameters are not sufficient to patentably distinguish an invention over the prior art. See *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984)

Allowable Subject Matter

Claims 14-17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 14, 15 and 19, the art of record does not teach, in addition to the structural features discussed in the rejection under '677, supra, a microlayered film having layers with corrugations combined with layers that are free of such corrugations or an elastic polymer, a non-elastic polymer and a super absorbent coextruded together.

Regarding claims 16 and 17, the most relevant art of record, '677 is disqualified as prior art under 35 USC § 103 (c). See applicant's remarks dated 10 March 2006, page 11.

Response to Arguments

Applicant's arguments filed 10 March 2006 have been fully considered but they are not persuasive.

Applicants assert that Topolkaraev only teaches a microlayer outercover, none of the other layers are considered to be microlayers. This argument is not persuasive because a thin film is interpreted herein as being a microlayer. During patent examination, the pending claims

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must be “given their broadest reasonable interpretation consistent with the specification.” *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). At least film liner (130) provides a liquid intake function.

Applicants further assert that the microlayer film of layer (120) does not provide a liquid retention function. This argument is not persuasive, because any liquid that makes it past the absorbent layer will be retained at the body-facing surface of barrier film (120), that is, it causes the liquid to be retained in the absorbent article.

Applicants assert that ‘677 does not disclose a microlayered film having the multiple different functions of the instant invention. This argument is not persuasive because similar to the manner in which the barrier of Topolkaraev functions, ‘677. It performs a fluid distribution function due to the corrugations of some of the layers. It performs a barrier and retention function as a result of the many layers impeding liquid passage all the way through the combined film. It performs an intake function due to its biodegradability (fluid at a top layer will degrade the biodegradable layers it contacts).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the claimed invention has different film regions which have different properties from each other, as opposed to all of them having the same properties) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bogart whose telephone number is (571) 272-4933.


In the event the examiner is not available, the Examiner's supervisor, Tatyana Zalukaeva may be reached at phone number (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300 for formal communications. For informal communications, the direct fax to the Examiner is (571) 273-4933.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Michael Bogart
20 May 2006


TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER